

# Wiring Instructions

## Wire Connections

Connections between the main 16/2AWG cable and the lighting fixtures are made using the space between the post and the Post Cap Light as a junction box.

When routing the main wire around the deck, leave a loop of extra wire at the top of each post to allow for splicing connections.

Use silicone filled wire nuts with corrosion protection and intended for outdoor use to make all connections. They shall be copper, copper alloy, or the equivalent.

When making splices, **do not pre-twist wires**. Pre-twisting wires can lead to a poor seal inside the wire nut causing corrosion and/or voltage drop.

## Wire Nut Instructions

Use the following guidelines for correct usage of wire nuts.

**IMPORTANT:** Turn off power before installing or removing connector. Product to be used in accordance with local and national codes.

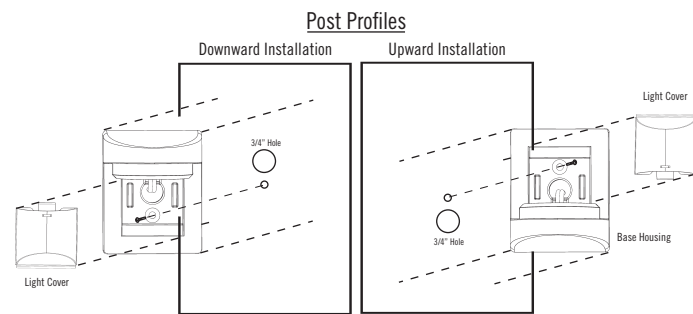
- Strip wires 5/8"
- Align frayed strands of conductors.
- Do not pre-twist. Place stripped wires together with ends even, but lead smaller stranded wires slightly ahead of larger solid or stranded wire.
- Twist connector onto wires pushing firmly until hand-tight. DO NOT over torque.
- Wipe excess sealant in and around conductors. DO NOT REUSE.

**Power Pack** Refer to instructions provided with the Power Pack.

## Installing Reversible Accent Light

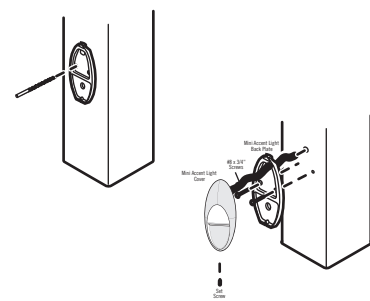
\*For Metal Rail or IRX post installation follow these instructions

- Determine if the light will be installed in downward or upward profile
- Center it on the post and mark the 3/4" hole.
- Using a 3/4" metal cutting drill bit, drill the 3/4" centered hole.
- Feed the wire from the from the light wick through the metal frame. Trim the excess wire and use supplied wire nuts to connect the light to the main circuit wiring
- Insert the bell housing into the 3/4" hole, level it, and attach using self tapping #6 screws.
- Clip the light cover over the base housing's center using the top clip and bottom lip. Gently apply upward, in, and let the light cover snap into place at the bottom.



## Installing Post Mounted Small Accent Light

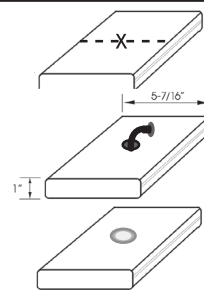
- Small Accent Light wire channel must be routed through the metal post railing.
- Remove Small Accent Light Cover from Small Accent Light Back Plate by loosening Set Screw located at bottom of Light Cover.
- Prepare the metal railing in the following manner:
  - Mark the location of the wire hole and the mounting screw holes using the template provided on the instructions that come with the product.
  - Drill a 3/8" hole for the wire and drill two 7/64" holes for the mounting screws.
- Route the Small Accent Light wire through the Back Plate then through the wire hole in the metal railing.
- Attach the Small Accent Light Back Plate to the post using two #8 x 3/4" screws provided.
- Re-install Small Accent Light Cover and secure with Set Screw with Allen Wrench.
- Trim excess wire and make wiring connections. (See *Connections* section of manual).



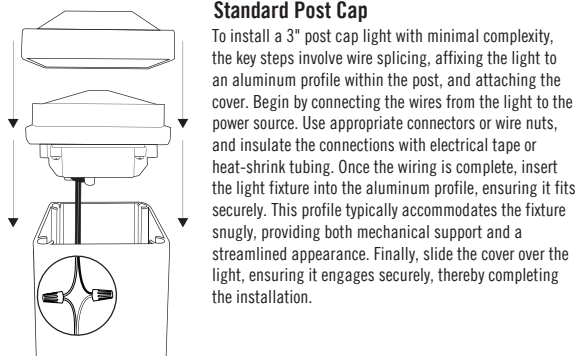
## Installing In-Deck Light

**!** *In-deck light should be installed in a low foot-traffic area.*  
*In-deck light can only be used when there is room under the deck to access the wires to make all of the connections*

- Locate and mark the centerline of the deck plank where the in-deck light will be mounted.
- Use a 31/32" drill bit to drill a "Press Fit" (snug) hole. If you only have a 1" drill bit available, use clear silicone to bond the light to the deck material.
- Guide the light's wire into the through hole.
- Push the light fixture, without force on the lens, into the through hole until the flange touches the deck surface. If the hole was drilled too large, use clear silicone to bond the light to the deck.
- The wire connections can then be made under the deck's surface.

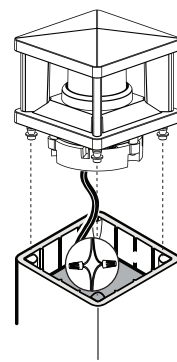


## Installing 3" Post Cap Light



### Standard Post Cap

To install a 3" post cap light with minimal complexity, the key steps involve wire splicing, affixing the light to an aluminum profile within the post, and attaching the cover. Begin by connecting the wires from the light to the power source. Use appropriate connectors or wire nuts, and insulate the connections with electrical tape or heat-shrink tubing. Once the wiring is complete, insert the light fixture into the aluminum profile, ensuring it fits securely. This profile typically accommodates the fixture snugly, providing both mechanical support and a streamlined appearance. Finally, slide the cover over the light, ensuring it engages securely, thereby completing the installation.



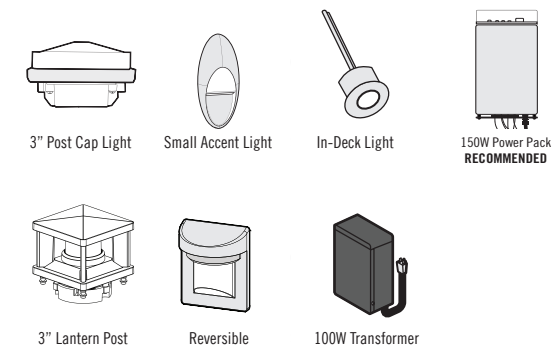
### Lantern Post Cap

- Run the main circuit wire up through the post sleeve.
- Connect the wires from the lantern post cap light to the main circuit power source using the wire nuts or connectors included
- Coil any access wire into the lantern base.
- Insert the lantern base into the sleeve and secure by pressing firmly downward. Locking the 4 corner pins into place. The light should be level.



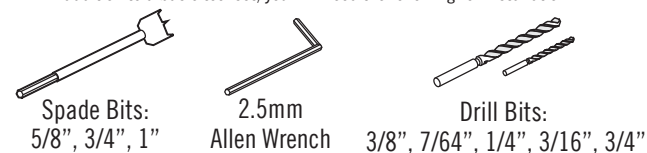
# LIGHTING

## Components



## Tools Required

In addition to a basic tool set, you will need the following for installation:

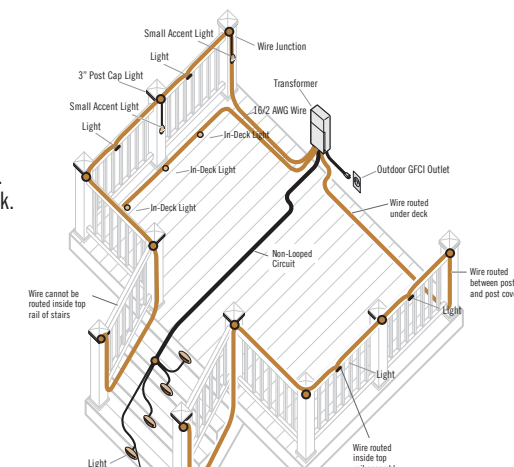


## Lighting Layout Overview

The TimberTech lighting system is designed for use with only TimberTech Railing products.

Below is a sample lighting layout showing fixture placement and wiring routes. When laying out the wiring for your deck, keep the following in mind:

- Building codes vary by locale, please consult all applicable codes before beginning project.
- Modifications must be made to railing components during assembly to accommodate wiring and fixtures. Do not begin deck construction until you have read the lighting instructions.
- Wiring for the lighting system shall be protected by routing in close proximity to the light, or next to a building structure such as a house or deck. The wiring may be buried in order to connect to the transformer or power pack.
- A maximum of 60W can be applied to a single run, and no more than 90W should be applied to the transformer. For power pack, refer to operating instructions. See the chart in the lower right corner for the wattage of each fixture.
- The 16AWG secondary supply wire can be buried for routing under deck or other obstacles. The fixture wires cannot be buried underground
- Light fixtures are not to be installed within 10 feet (1.52m) of a pool, spa or fountain.
- Trim post covers to correct length - see Post and Rail Prep page.
- Both the fixture wires and secondary supply wires have two wires to connect.
- When connecting multiple lights, circuit must be done in parallel (not in a series).



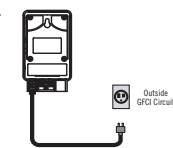
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Visit [www.timbertech.com/installation](http://www.timbertech.com/installation) to view TimberTech installation videos  
 SAVE THESE INSTRUCTIONS

## Transformer Connections

Consult the instructions provided with the transformer for additional information.

Power is supplied to the lighting fixtures via 16/2AWG wires connected to the provided transformer. One side of the 16/2AWG wire is connected to the Common terminal (C), the other side is connected to an Output terminal. One side of the 16/2AWG wire contains raised ridges to allow for easy identification (see Wire Connections section). The maximum recommended load for the transformer is 90 watts.



100 Watt Transformer	
On	Turns unit on
Off	Turns unit off
Auto	PhotoCell Control "Auto" - Lights come on at dusk and go off at dawn
4H	Stays on 4 hours after dusk
6H	Stays on 6 hours after dusk
8H	Stays on 8 hours after dusk

## Important Safety Precautions

**INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR INJURY TO PERSONS: IMPORTANT SAFETY INSTRUCTIONS**

**WARNING – TO REDUCE THE RISK OF FIRE OR INJURY TO PERSONS:**

- Turn off/unplug before servicing fixtures. Contact only switch/plug when turning on.
- Keep lamp away from materials that may burn.
- Do not operate the light fixtures with a missing or damaged cover.

The unit low voltage cable shall:

- be protected by routing in close proximity to the luminaire or fitting, or next to a building structure such as a house or deck;
- not be buried except for a maximum 6 inches (15.2 cm) in order to connect to the main low voltage cable; and
- have the length cut off so that it is connected to a connector within 6 inches (15.2 cm) from a building structure, a luminaire, or fitting.

Fixture	Wattage
3" Post Caps	4W
Small Accent	1W
In-Deck	1W
Lantern Post Cap	3W
Reversible Accent	2W

English  
 For Outdoor Use Only  
 SUITABLE FOR RECESSED WALL MOUNTING  
 ONLY. DO NOT MOUNT IN CEILING

